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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: Review of Submitted Data P-91-391

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[redacted]

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I. Introduction

P-91-391 was tested for its ability to induce gene mutation in the Salmonella/mammalian microsomal assay (Ames assay). A report entitled CL 959 REVERSE MUTATION ASSAY BY THE AMES TEST, Study No. 5671 MMO, 19-2-1990 is reviewed below. The test was conducted for S.N.P.E., Bergerac, France by the Centre International di Toxicologie (C.I.T.), Evreux, France.

II. Conclusion

P-91-391 is not mutagenic ~~when tested~~ in the Ames assay according to an acceptable protocol.

III. Basis for the Conclusion

An agent identified as CL 959, lot No. 7736A, a yellow liquid belonging to a class of chemicals identified as monofunctional acrylic urethanes, was tested for its ability to induce gene mutation in the Ames assay. This agent is presumed to be identical to the PMN chemical. The test was performed both with and without metabolic activation using five strains of bacteria, TA1535, TA1538, TA1537, TA98 and TA100. The S-9 fraction of livers of male rats treated prior to sacrifice with Aroclor 1254 for the nonspecific induction of metabolizing enzymes served as the source of metabolic activation. Test concentrations were selected on the basis of a preliminary toxicity test. Each concentration was tested in triplicate and the entire assay was repeated once for confirmation of results. In the first assay, five concentrations ranging from 50 μg to 750 μg/plate were used for all strains tested without metabolic activation and for strains TA1535 and TA100 with metabolic activation. In the second assay, all strains tested without metabolic activation and strains TA1535 and TA100 with metabolic activation were tested at concentrations ranging from 50 μg to 500 μg/plate. Strains TA1537, TA1538 and TA98 were tested at concentrations ranging from 100 μg to 2000 μg/plate in the first assay with metabolic activation and from 50 μg to 750 μg/plate in the second.

There was no evidence of mutagenicity in either assay. Positive control chemicals gave an acceptable response. It is concluded that P-91-319 is nonmutagenic when tested in the Ames assay according to an acceptable protocol.